REMARKS

This application has been carefully reviewed in light of the Examiner's Final Office Action dated July 14, 2005. Claims 1, 7, 9-13, 16-18, 20, 21 26, 29, 33 and 36 have been amended and claims 3,4, 8, 34 and 35 have been cancelled without prejudice. Reconsideration and full allowance are respectfully requested.

In paragraph 2 of the Action, the Examiner objected to the drawings. Applicant has submitted corrected drawings adding reference numerals 46, as requested by the Examiner. The specification has been amended to replace reference number 12 with numeral 112. No new subject matter has been added. It is believed this addresses the objections raised by the Examiner in paragraphs 2(a) and 2(b) and Applicant respectfully requests that this objection be withdrawn.

In paragraph 4(a), the Examiner objected to the disclosure because the brief description of the drawings fails to describe Figure 10. Such description has been added and it is believed that the objection has been overcome.

In paragraph 4(b), the Examiner objected to the disclosure at page 17, line 10. Applicant has amended the objected to phrase and submits that the objection has been overcome.

In paragraph 5(a), the Examiner objected to the specification because it failed to provide the proper antecedent basis for claims 8 and 34. Applicant submits that claims 8 and 34 have been cancelled and Applicant submits that this objection has been obviated.

In paragraph 5(b), the Examiner objected to the specification for failing to provide proper antecedent basis for claim 28. The specification has been amended as set forth above to provide proper antecedent basis for Claim 28. Applicant submits that the objection has been overcome.

In paragraph 6, the Examiner objected to claims 12, 13, 16-18 and 26 because of apparent grammatical and typographical errors and other reasons. Applicant has amended all of these claims and submits that the objections to them have been overcome.

In paragraph 7, the Examiner rejected claims 1-4, 6-21, 23-30, 32, 35 and 36 under 35 U.S.C. 112. Claims 1, 4, 7, 20 and 35 have been amended to address these rejections and it is believed that these rejections are overcome.

In paragraph 8, the Examiner rejected claims 1-4, 6-21, 23-30 and 32-40 under 35 U.S.C. 102(e) as being anticipated by Cornay (US Pat. App. 2003/0004002). The rejected claims include independent claims 1, 20 and 33. This rejection is respectfully traversed.

As set forth, independent claim 1 is directed to a constant velocity torque transfer device that provides for reduced vibration. The device includes first and second shafts that are interconnected by a connecting yoke which may be provided, for example, in the form of a third intermediate shaft. The connecting yoke includes an inner bore in which a bearing is disposed. A linkage extends through the inner bore of the yoke between the first and second shafts. The linkage includes a first linkage member associated with the first shaft and second linkage member associated with the second shaft. The first and second linkage members are coupled by a joint such that they rotate in unison. A tube having a circular outside surface is rotatively coupled directly to the inner bore of the connecting yoke by the bearing. The tube receives the first and second adjacent ends of the first and second linkage members within a tube bore that is offset from a center point the circular outside surface of the tube. The tube bore houses the joint that interconnects at first and second linkage members while maintaining the adjacent ends of the first and second linkage members at a non-zero angle. By using the bearing to rotatively couple the circular outside surface of tube to the inner bore of the connecting yoke, the linkage between the first and second shaft is supported along its length.

This increases the rigidity of the linkage and, thus, inhibits vibration. See specification page 21, lines 1-6.

Independent claim 20 is directed to a constant velocity torque transfer device that includes a first yoke attachable to a first shaft, a second yoke attachable to second shaft and a connecting yoke for transmitting torque from the first yoke to the second yoke. A linkage extends through a bore of the connecting yoke and includes the first section associated with the first yoke and second section associated with the second yoke. A joint couples adjacent ends of the first and second sections such that they may rotate in unison. The device further includes a centering tube that includes first and second sockets for receiving the adjacent ends of the first and second sections. The first and second sockets are disposed at a first nonzero angle to maintain the adjacent ends at the first nonzero angle. The centering tube is rotatively connected to the bore of the connecting yoke.

Independent claim 33 is directed to a torque transfer device that utilizes a centering mechanism. The device includes a first shaft, a second shaft and a connecting yoke that connects the first and second shafts. Disposed within the connecting yoke is a tube that is bent between its first and second ends. A circular lobe that is disposed on outside surface of the bent tube is sized for receipt within a bearing disposed within a central bore of the connecting yoke. The bearing directly and rotatively couples the tube with the inside surface of the connecting yoke to allow rotation therebetween. The device further includes first and second linkage members wherein each linkage member has a first end that is rotatively received within an end of the bent tube and a second end that is adapted for receipt within one of the shafts. A joint connects a first and second linkage members within the bent tube.

A set forth in each independent claim, a device which receives first and second linkage members is rotatively connected directly to an inner bore of a connecting yoke that interconnects first and second shafts. Rotatively connecting the member to he inner bore allows for supporting the linkage, which extends between the first and second shafts, along its length to reduce vibration while still permitting the first and second linkage members to rotate relative to the connecting yoke.

As set forth, the Cornay patent discloses a centering mechanism for use with universal joints. Specifically, the Cornay patent sets forth four different embodiments of universal joints incorporating centering mechanisms as shown in figures 1, 9, 14 and 19. In each embodiment first and second cam rods 102, 103, 202, 203, 302, 303, 402, and 403 are supported at equal angles within a cam tube 101, 201, 301 and 401. See paragraph 57. As shown in each figure, a portion of each cam tube in each embodiment a portion of the outside surface of the can tube 101, 201, 301 and 401 is in a spaced relationship with an inside surface of the connecting yoke or coupling means 136, 236, 336, and 436. That is, while the centering device is operative to turn within a bore of the connecting yoke, the outside surface of the centering device is not connected (e.g., rotatively coupled) to the inside surface of the bore of the connecting yoke. Accordingly, Cornay fails to support the linkage to along its length as variously set forth above. Therefore, Cornay fails to disclose the device as set forth in claims 1, 20 and 33. Applicant respectfully requests that these rejections be withdrawn.

In response to Applicant's previous argument, the Examiner noted that the centering device "*is* (at least indirectly) coupled to the inside surface of the connecting yoke." Applicant submits that the direct connection of the centering device is necessary to achieve the benefits set forth above. Therefore, the applicant has attempted to include subject matter in each claim to more distinctly set forth such direct connection.

Based upon the foregoing, Applicants believe that all pending claims are in condition for allowance and such disposition is respectfully requested. In the event that a telephone conversation would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned.

Respectfully submitted,

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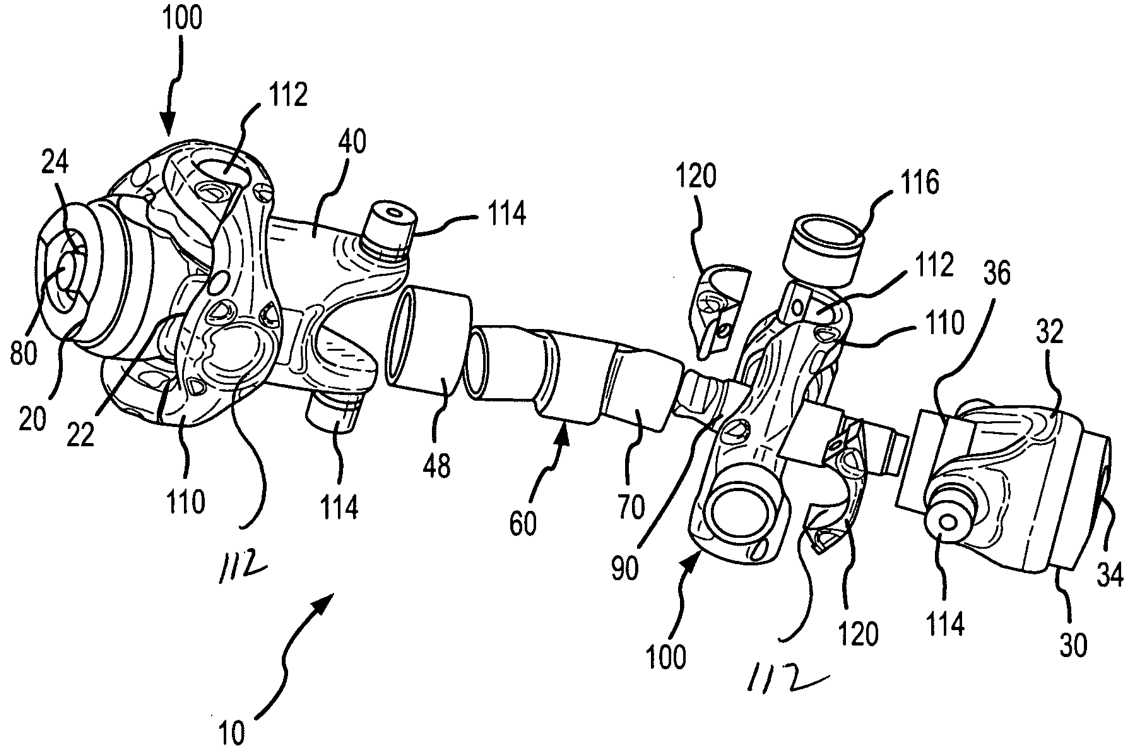

FIG.2

Serial No.: 10/684,612 *Revised Drawing* Page 2 of 2
Title: "CAM SYSTEM STABILIZER"
Inventors: BIGELOW, et al.
Docket No.: 50063-00008
Russell T. Manning (720)562-5502

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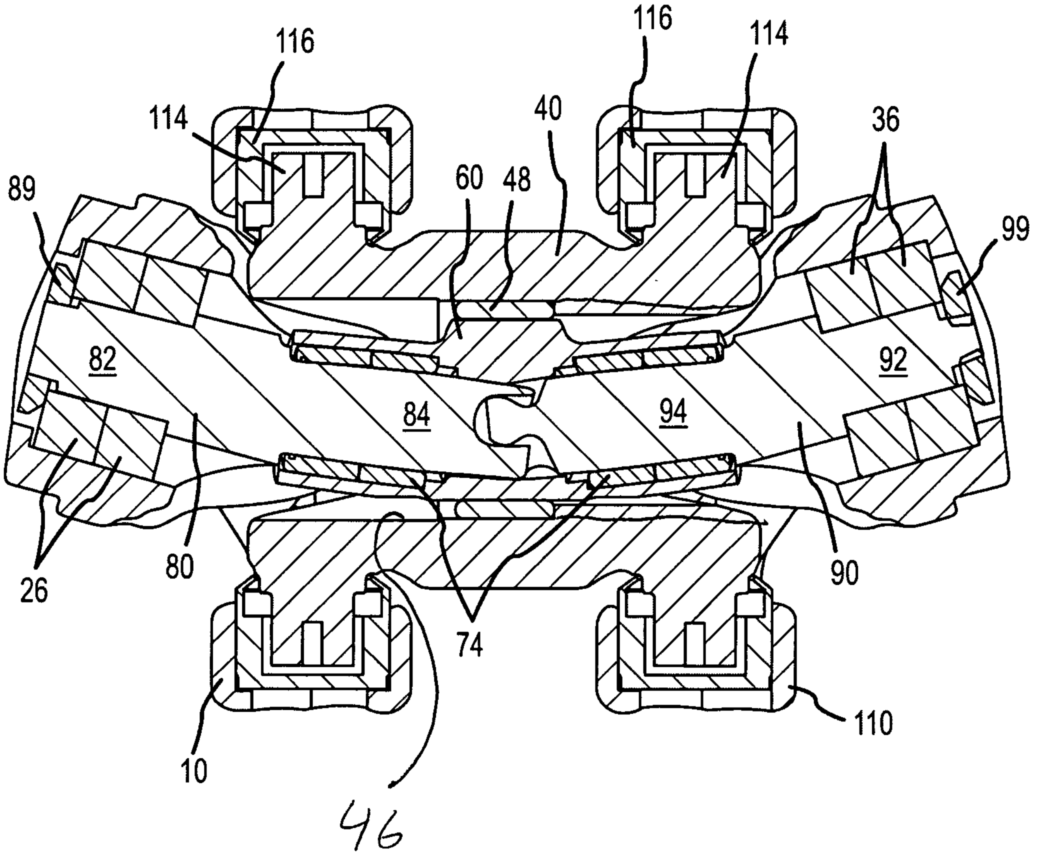

FIG.10